

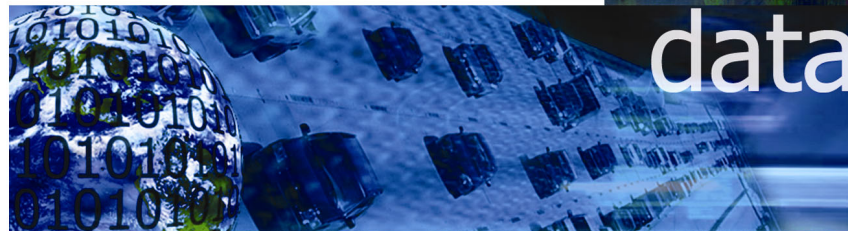
NATMEC 2002

North American Travel Monitoring Exhibition & Conference 2002



Third International Conference on Weigh-In-Motion

May 12-16, 2002 Rosen Plaza Hotel Orlando, Florida





This conference is presented by:



This conference is co-sponsored by:



WELCOME



Tom Barry, Secretary, Florida
Department of Transportation

Welcome to NATMEC 2002 and the Third International Conference on Weigh-in-Motion. We've put together an exciting agenda for you that we hope you'll find both educational and entertaining. It's our pleasure being your host – again.

You are coming back to your roots as you return to Orlando. The first national conference dedicated to automating the collection and use of traffic monitoring data for transportation planning was held here in 1974.

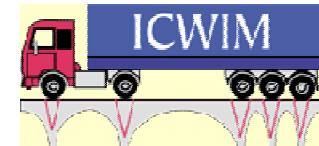
This year's conference is designed to give you the latest technology, knowledge and progress in travel monitoring and data analysis so you can use it to better serve the public.

Thank you for choosing Florida as your convention and vacation destination. Please take advantage of all that the conference and the Sunshine State have to offer. Enjoy your stay with us.

SUNDAY, MAY 12, 2002

AFTERNOON

1:00 PM—5:30 PM
Registration



5:30 PM—7:30 PM
Welcome Reception
Ballrooms C & D
(vendor displays open)

Please attend and renew old friendships, meet new friends, and generally “unwind” and enjoy the delicious hors d' oeuvres. A cash bar will also be available.

The Florida Department of Transportation is pleased to host the *North American Travel Monitoring Exhibition and Conference—2002*. The conference is co-sponsored by the Florida Department of Transportation and the United States Department of Transportation—Federal Highway Administration and is being held concurrently with the *Third International Conference on Weigh-In-Motion*. The conferences are endorsed by the Transportation Research Board, American Association of State Highway and Transportation Officials, and Transport Canada.

BREAKFAST (provided) 7:30 AM—8:30 AM Ballrooms C & D (vendor displays open)

8:30 AM—8:55 AM
Opening General
Session NATMEC &
ICWIM3 combined



Chair: Ysela Llort, State Transportation Planner, FDOT
 Tom Barry — Secretary of the Florida Department of Transportation
 Jim St. John — Division Administrator, Federal Highway Administration
 Bernard Jacob — Department Head, LCPC
 Mike Snyder — Florida Department of Transportation District 5 Secretary



9:05 AM—10:00 AM
NATMEC Opening
 Chair: Ysela Llort

Susan Lapham — Associate Director, Bureau of Transportation Statistics
 Barna Juhasz — Director, Office of Highway Policy Information FHWA
 Alan Pisarski — Consultant, TRB Data Committees

9:05 AM—10:00 AM
 Bill McCall — Introductions
 Bernard Jacob — Output and Dissemination of WIM Developments in Europe
 Mark Hallenbeck — WIM in North America



BREAK 10:00 AM—10:30 AM Ballrooms C & D (vendor displays open)



10:30 AM—12:00 PM
Traditional Sensors
 Chair: Mark Gardner

This session provides some guidance on selecting the optimum location for constructing a continuous traffic monitoring site. It covers construction coordination, safe practices, and sensor installation techniques.

Dan Inabnitt — Traditional WIM Sensors Experiences in Kentucky

Mike Ashbrook — WIM Site Selection

Robert Triplett and Joe Avis — Sensor Sharing Among Applications



10:30 AM—12:00 PM
Privatizing Traffic Monitoring Programs
 Chair: Ron Tweedie

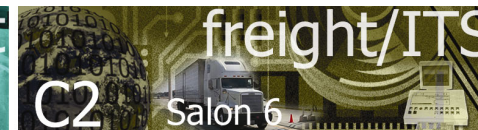
Traffic monitoring programs provide essential data for decision making throughout all facets of state transportation agencies. The speakers represent both the public and private sectors, and will share their experience in contracting for and providing these vital traffic monitoring activities.

Keith Merritt — An Arkansas Experience

Dayton Burlarley-Hyland — Amortized Performance Based Outcome WIM System Management

Todd Westhuis — Public/Private Partnerships: A Data Collection Team That Works

Dave Gardner — Ohio DOT Privatization Activities



10:30 AM—12:00 PM
CMS: The Role of Travel and Traffic Data
 Chair: Eugene Bandy

Now that Congestion Management Systems (CMS) have been with us almost a full decade, it is time to "look under the hood" and see how they utilize travel information. The session will begin with an overview of CMS, its needs for travel information, and examples of how data is used and presented.

Dan Blevins — Wilmington MPO

Mark Schlappi — CMS Data and Applications: Phoenix Metropolitan Area

Martin Guttenplan — CMS Data and Multimodal LOS Applications: Florida DOT

Keith Nichols — CMS Data and Applications: Hampton Roads MPO



10:30 AM—12:00 PM
WIM Testing (1)
 Chair: E. J. O'Brien/M. Caprez

Chia-Pei Chou — WIM in Asia

Daniel Stanczyk — Analysis of WIM Systems in the Continental Motorway Test

Sophie Jehaes — Analysis of WIM Systems in the Cold Environmental Test

Anne Marie McDonnell — Evaluation of Quartz Piezoelectric WIM Sensors in Connecticut

Discussion

LUNCH (provided) 12:00 PM—1:30 PM Ballrooms A & B

Keynote Speaker: Frederick (Bud) Wright, Executive Director, Federal Highway Administration



1:30 PM—3:00 PM Non-Traditional Sensors

Chair: Anne Marie McDonnell

Some of the newer types of sensors and techniques for acquiring traffic data will be presented.

Erik Minge—Update of the Evaluation of Non-Intrusive Technologies for Traffic Detection

William Tansil—The Michigan Experience with Utilizing Fiber Optic Sensor Technology

Alan Murray—Overview of Private Sector Approaches for Estimating Traffic Flow using Aerial Photography and Videography

Luz Elena Mimbela—Status of the Vehicle Detector Clearinghouse



1:30 PM—3:00 PM Non-Traditional Data Sources

Chair: Rick Schuman

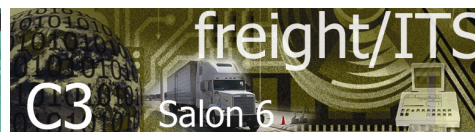
Examines different programs and technologies currently or soon to be available giving public agencies purchasing options.

Brian Smith—Anonymous Mobile Call Sampling: A New Approach to Traffic Monitoring

Mike Akridge—Innovative Data Collection Techniques: An Analysis of Probe Vehicle Technologies

Chung Eng—Intelligent Transportation Infrastructure Program

Paul Schuldiner—Video-Based Travel Time Information for Rural Traveler Information System



1:30 PM—3:00 PM Issues in Urban Traffic Data

Chair: Jim Thorne

Issues and practices associated with urban traffic data collection programs. Examples from an existing travel monitoring program will be followed by a discussion of traffic detectors, then a facilitated discussion of issues and practices used by agencies in urban data collection. The audience participation exercise will identify significant issues in urban traffic counting programs and possible best practices.

Ron Harris—Urban Traffic Data Collection by Georgia DOT

Vince Pearce—Traffic Detectors: Are They Working?

Audience Participation—Traffic Data Collection Issues



1:30 PM—2:15 PM WIM Testing (2)

Chair: E.J. O'Brien/M. Caprez

Arturo Gonzalez—Testing of a B-WIM System in Cold Environmental Conditions

Tom Papagiannakis—Laboratory and Field Evaluation of Piezoelectric WIM Sensor

Discussion



2:15 PM—3:00 PM WIM Standards (1)

Chair: Ralph Gillmann/Chia-Pei Chou

Barbara Ostrom—Site Characterization of LTPP SPS WIM Sites

Gonzalo Rada—Pavement Smoothness Specifications for LTPP WIM Locations

Discussion

BREAK 3:00 PM—3:30 PM Ballrooms C & D (vendor displays open)



3:30 PM—5:00 PM Data Archiving

Chair: Joe Avis

Collecting traffic data is just a single aspect of the overall job. A look at the development of databases to store traffic statistics and site maintenance information in a usable manner.

David Schade and Mike Walimaki—Michigan Database

Dawn Doyle—Information Technology Meets Engineering and Transportation Planning

Frank Tabatabaee—Continuous Counter Inventory Service Calls Database

Joe Avis—California's Integrated Transportation System Network



3:30 PM—5:00 PM State of the Art for Travel Time Data Collection and Analysis

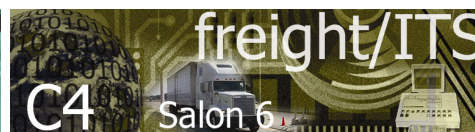
Chair: Michael Pietrzyk

This session will bring together the experiences of three innovative practitioners directly involved with travel time data collection and analysis, each with their own unique application and vision.

Jeff Woodson—Video-Based Travel Time Data Collection and Analysis for the Metrolina Region External Travel Survey

Brian Smith—The Virginia Smart Travel Van

Gordon Morgan—Travel Time for Performance Measures



3:30 PM—5:00 PM Estimation of Truck Traffic Volumes

Chair: Paul Bingham

Approaches to estimating and forecasting truck traffic volumes both within and between urbanized areas.

Edward Fekpe and Mohammed Alam—Truck Traffic Flow for Highway Capacity Analysis

Daniel Beagan—The Development of a Freight Truck Travel Demand Model for Florida

David Hunt—Freight Movements in the Orlando Urbanized Area

Haitham Al-Deek—Modeling and Predicting Heavy Truck Movements at Seaports



3:30 PM—4:20 PM WIM Standards (2)

Chair: Ralph Gillmann/Chia-Pei Chou

Paul Dixon—The Development of an OIML Recommendation for "Automatic Instruments for Weighing Road Vehicles in Motion"

Clyde Lee—ASTM WIM Standard E 1318—Revised for the New Millennium

Questions

4:30 PM—5:45 PM Panel Discussion 1: Harmonization of WIM Standards and Tests

BREAKFAST (provided) 7:30 AM—8:30 AM Ballrooms C & D (vendor displays open)



8:30 AM—10:00 AM
ITS/DATA General Session

Chair: Anita Vandervalk

Harshad Desai and Chester Chandler—Mining of Florida ITS Data for Transportation Planning

Jeff Paniati—Data Collection on the National Highway System—Requirements for a National "INFOstructure"

Vince Pearce—Using ITS Data in Measuring the Reliability of Transportation Network Performance

Tom Palmerlee—Transportation Operations and Data—Making the Connection at TRB and AASHTO



8:30 AM—8:50 AM Sponsor Welcome

8:50 AM—10:00 AM
Technical Aspects of WIM Products

Chair: Sophie Jehaes/Perry Kent

Emil Doupal—Measurement of Dynamic Wheel Load Distribution

Dave Hill—Networked Fibre Optic WIM Sensors

Poster and Discussion

BREAK 10:00 AM—10:30 AM Ballrooms C & D (vendor displays open)



10:30 AM—12:00 PM
Quality Control of Data

Chair: Glenda Fuller

Many times it is assumed that if the traffic data collected by the traffic counters is successfully retrieved back in the office, then the traffic program is a success. Often this is not the case. Not only does the data have to reach the office, it has to be of good quality to be of benefit to anyone. This session will look at the methods for detecting good and bad volume, speed, classification, and weight data.

Susan Cosper—Quality Control for Short-Term Daily Counts

Steven Jessberger—Ohio Traffic Data Quality Control Procedures

Dennis Williams—Automating Class and Volume Editing with the Pennsylvania Traffic Editing Program



10:30 AM—12:00 PM
Remote Sensing

Chair: Joel Morrison

In March 2000, the U.S. Department of Transportation funded four university consortia to work on incorporating into transportation studies the use of remote sensing. One consortium was given the task of studying transportation flows. This session reports some of the activities of the National Consortium for Remote Sensing in Transportation-Flows (NCRST-F).

Gregory Jordan—Use of Remote Sensing to Evaluate and Measure Highway Traffic Flows

Delmar Anderson—Truck Traffic Analysis Using IKONOS Satellite Imagery

Mark McCord—Space and Air Based Remote Sensing of Transportation Flows: Promising Applications



10:30 AM—12:00 PM
Making the Connection Between ITS and Traffic Monitoring

Chair: Shawn Turner

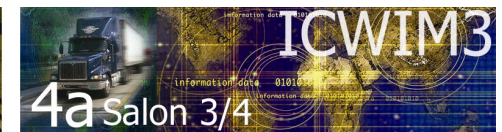
Focus on making the connection between 2 previously disparate communities: ITS/Operations and Traffic Monitoring/Planning. Presentations on existing partnerships that are being formed, as well as on planned partnerships and data sharing / integration.

Rick Schuman—Building a National Transportation INFOstructure: Recent Activities and Its Impacts on the Traffic Monitoring Community

Terri Johnson—Building Data "Bridges" Between Operations and Planning: Case Study in Pittsburgh and Philadelphia, Pennsylvania

Mark Hallenbeck—All RHODES Lead to Seattle: Getting Useful Arterial Street Data from the RHODES Traffic Signal Control Software

Shawn Turner—Making the Operations to Planning Connection in Texas: Experiences and Findings



10:30 AM—12:00 PM
WIM Technologies (1)

Chair: Bernard Jacob/Anne Marie McDonnell

Delphine Labry—Accuracy Comparison of Three MS-WIM Static Weight Estimation Algorithms

Eugene O'Brien—An Investigation Into the Use of a Neural Network Algorithm in Multiple-Sensor Weigh-In-Motion of Road Vehicles

Sophie Jehaes—Axle Rank Calibration, A Tool to Improve the Accuracy of Portable WIM Systems

Ling Yu—Multi-Axle Load Identification in the Laboratory Discussion

LUNCH (provided) 12:00 PM—1:00 PM Ballroom A



1:00 PM—2:30 PM

LTPP Specific Pavement Studies

Chair: Larry Wiser

An update of the Long Term Pavement Performance Study and its needs for quality traffic data. Explores the need for research grade traffic data and the pooled fund study developed to provide it.

Larry Wiser—LTPP SPS Traffic Pooled Fund Study

Barbara Ostrom—Pilot Studies and Lessons Learned

Richard Rogers—A State Perspective: Opportunities and Challenges

Larry Wiser, Richard Rogers & Amy Kruger—Pre-Proposal Conference-LTPP WIM Assessment, Calibration and Performance Evaluation Contract



1:00 PM—2:30 PM

Integration of Data Sources

Chair: Pat Hu

Explores how different agencies have collected and combined data sets in order to meet their system monitoring needs.

Anita Vandervalk—Summary of Peer Exchange on Data Integration

Daniel Papiernik and David Fletcher—Assessing Your Data Management Infrastructure: A Check-Off List for Data Integration

David Zavattero—Integrating Traditional and Non-Traditional Data Sources: The GCM Traveler Information System

Roemer Alfelo—Data Integration for Asset Management—US Perspectives



1:00 PM—2:30 PM

ITS Archived Data—Now and the Future

Chair: Ralph Gillmann

An update on the state-of-the-art in the management of archived data from ITS/Operations.

Ralph Gillmann—The Status of ADUS

Kim Ferroni—ITS: A Resource for Archived Traffic Data

Rob Bostrom—ARTIMIS Archived Data Partnership: The Kentucky Transportation Cabinet and the Ohio Transportation Department

Rich Margiotta—ITS as a Data Source for Traditional Transportation Information Systems



1:00 PM—2:30 PM

WIM Technologies (2)

Chair: Bernard Jacob/Anne Marie McDonnell

Arturo Gonzalez—Influence of Dynamics on Accuracy of a Bridge WIM System

Michael Quilligan—Development and Testing of a Multiple Vehicle Bridge WIM and a Vehicle Transverse Location Algorithm

Tatsuya Ojio—Bridge WIM Systems Using Stringers of Plate Girder Bridges

Ales Znidaric—The Next Generation of Bridge WIM Systems

Poster and Discussion

BREAK 2:30 PM—3:00 PM Ballrooms C & D (vendor displays open)



3:00 PM—5:00 PM

Automatic Traffic Recorder Fundamentals

Chair: Rick Reel

Covers the design of solar power supplies, surge suppressors, and communications.

Dr. Bruce Harvey—Lightning Suppression at Telemetered Traffic Monitoring Sites

William Wilson—Traffic Monitoring Using Solar Power

Dr. Bruce Harvey—Tests and Analysis of Analog Modems for Remote Data Collection at Telemetered Traffic Monitoring Sites

Jim Cerqua—Digital Pagers for Telemetry



3:00 PM—5:00 PM

Integration of Data Sources (cont.)

Chair: Pat Hu

Michael Trickey—Data Integration for Asset Management—A Canadian Perspective

Mark Hallenbeck—Integration of Multiple Data Sources to Provide Truck Performance Monitoring

Steve Gordon—Issues for Real-Time Data Integration

Demin Xiong—Future of Data Integration: Combine Remote Sensing Data and Ground Truth Data

Kirk Mangold—Integration of Road Inventory and Traffic Counting Programs



3:00 PM—5:00 PM

Monitoring for North American Cross Border Traffic

Chair: Frank Southworth

The session will identify the types of traffic count data being collected at border crossings and provides examples of how this data is being used in specific freight operations and planning studies.

Bruce Lambert—The US DOT's Freight Analysis Framework

John McCray—Cross-Border US-Mexico Traffic

Rick Donnelly—Data on Truck Flows Across the US-Canada Border



3:00 PM—4:30 PM

Enforcement Using WIM

Chair: Chris Koniditsiotis/V. Dolcemascolo

H. van Loo—WIM Projects in the Netherlands

Daniel Stanczyk—Overloaded Vehicle Screening for Enforcement

Dennis Kroeger—Application of WIM Technologies in Overweight Vehicles Enforcement

Ralph Meschede—Poster: Top Trial Project

Ronald Henny—Poster: Procedures for Acceptance of WIM Systems for Automatic Enforcement of Overloading

Questions

4:30 PM—5:30 PM

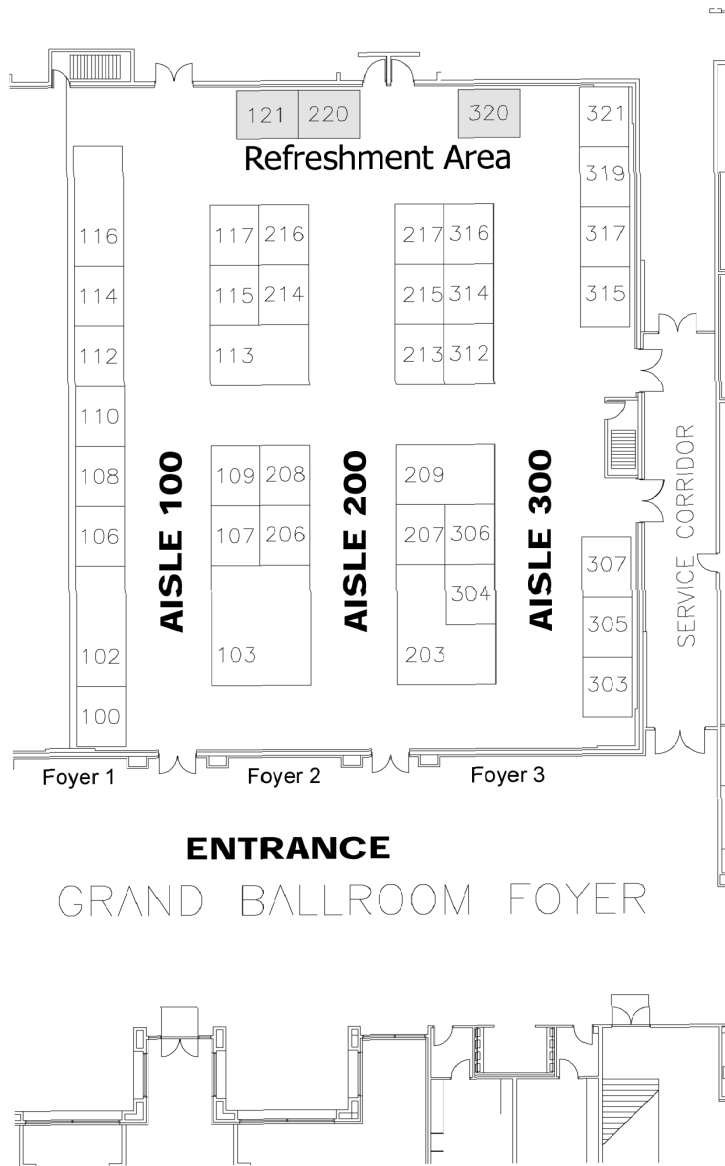
Panel Discussion 2: Enforcement, Technical and Legal Issues

EXHIBITORS BALLROOMS C & D

6

Please visit our exhibitors' area where a variety of data collection equipment, software, and/or services are on display. In addition to the indoor display area, several exhibitors will be displaying equipment in the hotel parking lot on Wednesday morning from 10:30am—12:00pm. These exhibitors have graciously contributed the refreshments you will be enjoying during conference breaks.

EXHIBIT HALL HOURS: Sunday 5/12 5:30-7:30PM Monday 5/13 7:30-10:30 AM, 3:00-5:00 PM Tuesday 4/14 7:30-10:30 AM, 2:30-5:00 PM



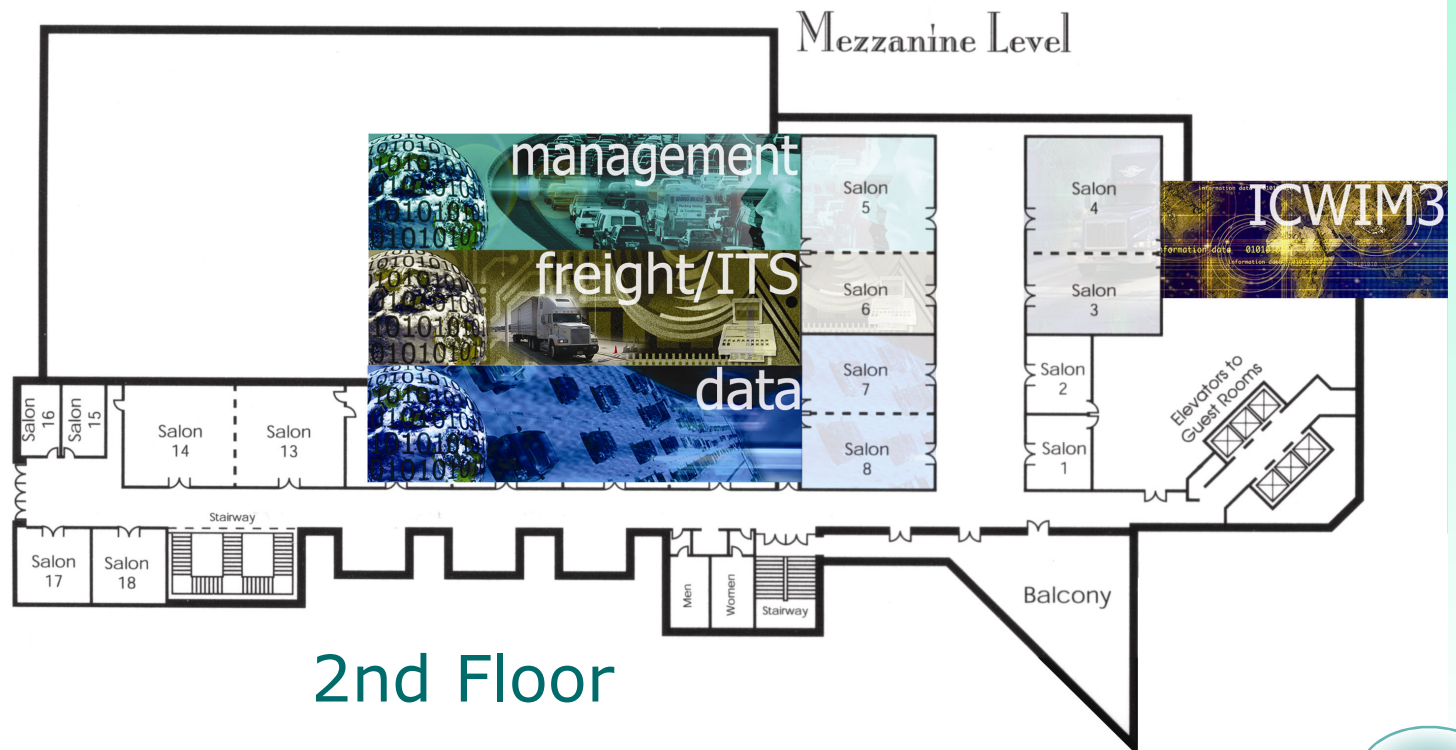
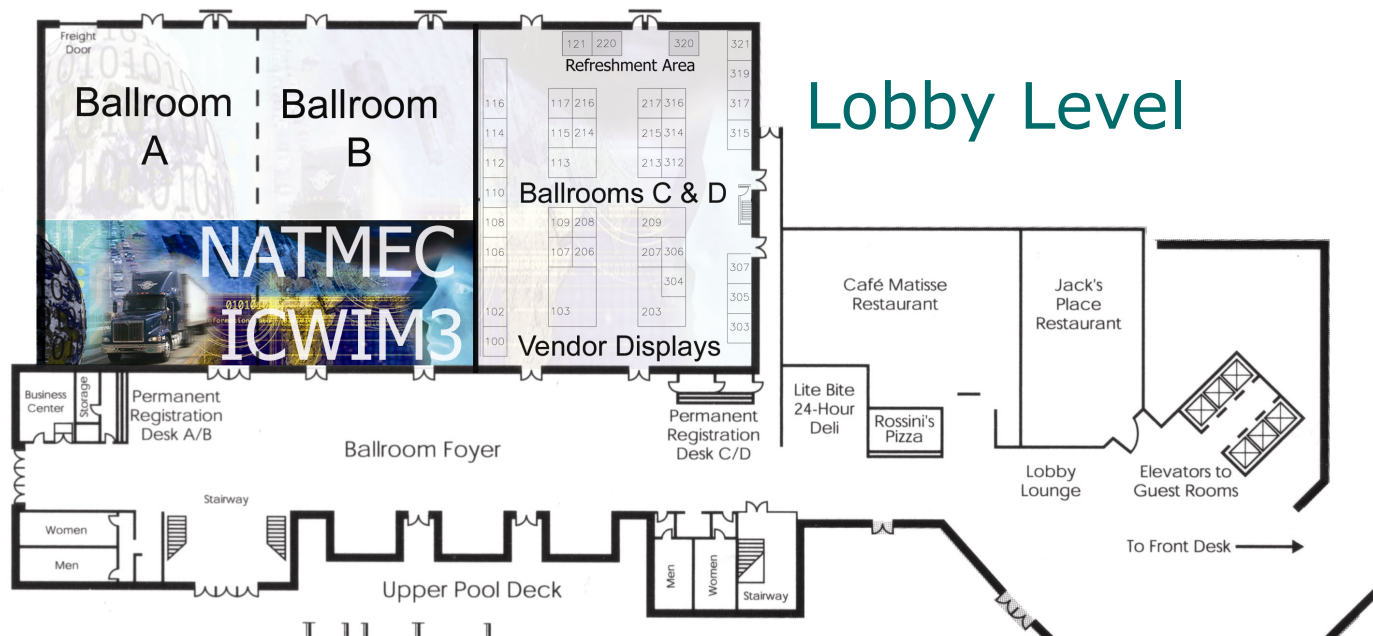
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203 International Road Dynamics, Inc.
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 208 Multicom, Inc./Multilink, Inc.
 209 Jamar Technologies
 213 Athens Technical Specialists, Inc.
 214 The Traffic Group
 215 Trancite Logic Systems
 216 Mettler-Toledo
 217 Pat America, Inc.
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303 Eres Consultants, Inc.
 304 U.S. DOT—Bureau of Transportation Statistics
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 314 Southern Traffic Services
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 316 Battelle Memorial Institute
 317 Omni Weight Corporation
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 Foyer 3 VDC & A S T M
 Foyer 4 Computer Recognition Systems, Inc.
 Foyer 5 The Ohio State University Center for Mapping





3M Contact: Marcia Lozier

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DIA-L Associates Contact: Lee Hockert

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Diamond Traffic Products Contact: Andrea Taylor

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RTMS is a radar-based vehicle detection sensor capable of providing volume, speed, occupancy, and long vehicle count in up to eight individual lanes.

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ECM provides engineering products and services in the traffic monitoring arena, specializing in turnkey weigh-in-motion solutions, piezo sensors, and non-intrusive radar vehicle detectors.

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ERES provides services that include installation and maintenance of traffic monitoring sites and pavement engineering.

Federal Highway Administration Contact: David L. Jones

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Washington D.C. 20590
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david.l.jones@fhwa.dot.gov

Booth No. Foyer 1 & 2

Geostats, LP Contact: Jeremy Myers

530 Means Street, NW, Suite 310
Atlanta, Georgia 30318 USA
(404) 588-1004 Fax (404) 588-1227
jmyers@geostats.com

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Geostats specializes in the application of GPS and GIS to transportation data collection and analysis.

International Road Dynamics, Inc. Contact: Brian Taylor

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info@ird.ca

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JAMAR Technologies Contact: James Martin

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EXHIBITORS

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Omni Weight Corporation **Contact: Vesa Pylkkanen**
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info@owacacamerica.com Booth No. 317

Optical Sensor Systems **Contact: Dr. Barry Grossman**
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b.g.grossman@ieee.org Booth No. 107

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g.peck@patamerica.com Booth No. 217

Peek Corporation **Contact: Michael McKee**
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michael.mckee@peekcorp.com Booth No. 103

R A I Products **Contact: John Rosenblatt**
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RoadRAMP Systems **Contact: Tim Fielder**
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Southern Traffic Services, Inc. **Contact: Carolyn Thornton**
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Pelahatchie, Mississippi 39145 USA
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cthorton@netdoor.com Booth No. 314

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Spectra Research, Inc. **Contact: Mike Johnson**
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Dayton, Ohio 45420 USA
(937) 299-5999 Ext. 19 Fax (937) 299-7773
mjohnson@spectra-research.com Booth No. 305

Sterela **Contact: Manuel Reolid**
P. O. Box 2, Impasse Pedenau
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info@sterela.fr Booth No. 108

Established in Pins-Justaret, near Toulouse, in 1980 with a capital of 262 112 euros, Sterela's principal activities are the research, design, manufacture and sales of electronic systems. From the beginning, it has specialized in three sectors: traffic department, aeronautical department, and industry department.

Thermocoax **Contact: Tracy Dejong**
6825 Shiloh Road East, Suite B7
Alpharetta, Georgia 30005 USA
(678) 947-4430 Fax (678) 947-4450
tracy.dejong@thermocoax.com Booth No. 319

The Traffic Group **Contact: Donald Hayes**
9900 Franklin Square Drive, Suite H
Nottingham, Maryland 21236 USA
(410) 931-6600 Fax (410) 931-6601
dhayes@trafficgroup.com Booth No. 214

Services include data collection services, traffic engineering, transportation planning, planning studies, traffic engineering design, and roadway/parking lot design.

Timemark, Inc. **Contact: Mike Bonser**
3080 22nd Street, SE
Salem, Oregon 97302 USA
(503) 363-2012 Fax (503) 363-1716
sales@timemarkinc.com Booth No. 113

Innovative data collection equipment, stellar quality products and support. One road, one system, no limits.

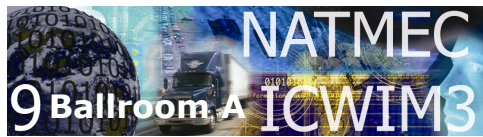
Trafinfo Communications, Inc. **Contact: Sudhir Murthy**
209 Lowell Street
Lexington, Massachusetts 02420 USA
(781) 863-0051 Fax (781) 863-0051
smurthy@trafinfo.com Booth No. 207

Internet-based wireless telemetry system with nation-wide coverage using digital paging and satellite communication technologies.

Trancite Logic Systems **Contact: Joshua Evarts**
7646 West Lemhi #6
Boise, Idaho 83709 USA
(208) 323-2481 Fax (208) 322-6031
jevarts@pathfinderdg.com Booth No. 215

U.S. DOT Bureau of Transportation Stats. **Contact: Renita Hamlet**
400 Seventh Street, SW
Washington, DC 20590 USA
(202) 366-6947 Fax (202) 366-3197
renita.hamlet@bts.dot.gov Booth No. 304

Vehicle Detector Clearinghouse VDC **Contact: Luzelena Y. Mimbela**
Box 30001, Department 3SOL
Las Cruces, New Mexico 88003-8001 USA
(505) 646-4240 Fax (505) 646-2960
lmimbela@nmsu.edu Booth No. Foyer 3

BREAKFAST (provided) 7:00 AM—8:00 AM Ballroom A**8:00 AM—9:30 AM
COMBINED NATMEC/
ICWIM SESSION**

Chair: Ralph Gillmann and Mulder Brown

Perry Kent—The Evolution of Vehicle Weighing in the United States

Rick Quinley—The CTWIM Suite

David Jones—Summary of US National and Regional Trends in Truck Loadings

Herb Southgate—Administrative Tools to Check Quality of WIM Weight /Class Data

POSTER SESSION/BREAK 9:30 AM—10:30 AM Ballroom A Foyer

Mulder Brown, Coordinator

Mulder Brown—First National Conference/Workshop on Automating Data Collection for Transportation Planning—November 6-7, 1974

Barry Grossman—Advances in Fiberoptic Sensors for Classification and WIM

Barry Mason—Florida's State-of-the-Art Truck Weigh Stations

Ales Znidaric—Measurements on Short Slab Bridges Without Axle Detectors

George Mintsis—Performance of HGV's in a Major Greek Road Network Using WIM Technology

Lili Poulikakos—Long-Term Pavement Performance Monitoring of a Swiss Motorway

John Harris—Portable and Permanent Sites HS-WIM Data Comparison

Ralph Meschede—Top Trial Project

Dennis Williams—Pennsylvania Department of Transportation Traffic Information System

Gary Flynn—Making Traffic Cameras Smart

Renatus Mussa—Laboratory Evaluation of Adhesives Used In Installation of Piezoelectric Axle Sensors

Steven Jessberger—Ohio's FHWA Scheme F Classification Tree

Joe Avis—Sensor Sharing

Bill Hughes—Traffic Monitoring Activities at the Kansas DOT

Michael S. Curley—Data Processing Using Graphics in Microsoft Access

**10:30 AM—12:00 PM
VENDOR INFOMERCIALS
FIELD DEMOS**— Salon 5, 6, 7, & 8
— Rear Parking Lot**11:15 AM—12:00 PM****Data Quality, Management, & Use**

Chair: Mark Hallenbeck/J. Leal

Paul Grundy—Accommodation of Time Dependent Drift of WIM Data

Stephen Cropley—WIM Net—An Internet Based WIM Data Management Application

Discussion

LUNCH (provided) 12:00 PM—1:00 PM Ballroom A**1:00 PM—2:30 PM****Weigh In Motion**

Chair: Mulder Brown

Quality control techniques developed specifically for WIM data.

Curt Dahlin—A Process to Calibrate a WIM System, Monitor That Calibration and Determine the Validity of the Weight Data

Anne Marie McDonnell—Evaluation of Weigh in Motion (WIM) System Utilizing Quartz Piezoelectric Sensor Technology

Herb Weinblatt—Alternate Methods for Estimating ESALS

Kip Jones—Evaluation of Quartz Piezo WIM Using Enforcement Data

**1:00 PM—2:30 PM****MPO Uses of Urban Traffic Monitoring**

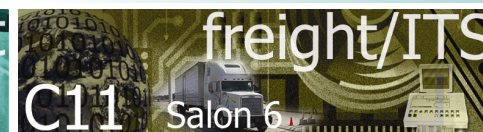
Chair: Jean Wolf

How MPOs use travel data and its importance.

Andy Mullins—Integration of Traffic and Transportation System Data for Use in Travel Demand Analysis

Guy Rousseau—Application of HPMS Data in Travel Demand Modeling at the Atlanta Regional Commission (ARC)

Terrell Shaw—Use of Urban Traffic Monitoring Data to Estimate LOS Defaults and Service Volumes

**1:00 PM—2:30 PM****Innovative Uses and Applications of ITS/Operation Data Archives**

Chair: Robert Winick

What users are doing with data archives.

Shih-Miao Chin—Estimating Temporary Loss of Capacity Due to Incidents, Work Zones, and Crashes

Robert Benz—Monitoring Mobility: Utilizing Environmental, Weather, and Traffic Data

Robert Winick—Using Archived Data in the Validation of Travel Time Predictions

Dena Jackson—Use of ITS Data for Reliability and the Florida Reliability Method

**1:00 PM—2:30 PM****Application of WIM to Structures**

Chair: Ales Znidaric/Jerry Hajek

Fritz Prophete—Using WIM and FWD Data to Evaluate Impacts of Load Restrictions on Pavements

Alan O'Connor—Use of WIM Data to Predict Characteristic Live Load Effects for Highway Bridge Design

Jerry Hajek—WIM Data Requirements for Mechanistic Pavement Design

Discussion and Posters

BREAK 2:30 PM—3:00 PM Ballroom A


3:00 PM—4:30 PM
2002 Pavement Design Guide

Chair: Tony Esteve

A look at the forthcoming pavement design guide and its impacts on the traffic data collected to support it.

Katherine Petros—The Use of Traffic Monitoring Data for the 2002 Pavement Design Guide
 Herb Weinblatt—Traffic Data Collection and Analysis for Pavement Design

Rob Robinson—Traffic Monitoring from the Illinois DOT's Perspective

Tony Esteve—Summary of Recommendations from the Traffic Monitoring Guide


3:00 PM—4:30 PM
Future Data Programs and Performance Measures

Chair: Rich Margiotta

A first glimpse into what the future holds for performance measures and the data needed to support them. Presentations will be based on extrapolating current practice, views, and concepts rather than "hard analysis."

Tom Friedman—Future Uses of AVL/APC Data

Mark Hickman and Alejandro Angel—An Investigation of the Use of Aerial Video for Traffic Data Collection

Discussion


3:00 PM—4:30 PM
GIS and Web Tools to Organize Urban Traffic Data

Chair: Kitty Hancock

This session reviews the set of geographic information systems and web sites for traffic and accident data. It will share lessons learned and some of the problems in doing this at the local level.

Shih-Miao Chin—Visualizing Urban Traffic Data

Michael Vickich—The Houston TranStar Traveler Information Web Site

Steve Taylor—Applying Today's Technology to Traditional Transportation Projects


3:00 PM—5:15 PM
Freight Mobility, Road Safety and Pricing

Chair: Mark Hallenbeck/J. Leal

Chris Koniditsiotis—National Study of Heavy Freight Vehicle Loading in Australia

Alan Clayton—Using WIM Data in a Modern Truck Traffic Information System

Angela Gardiner—Using WIM for Performance Based Contracts

Discussion and Poster

Conclusions:

Mark Gardner—Technical Output of the Conference

Eugene O'Brien—Scientific Output of the Conference

Bill McCall—Perspectives

DINNER (provided with entertainment) 7:00 PM—9:00 PM Ballroom A

MAGIC · LAUGHTER · INSPIRATION
GIOVANNI
 ANYTHING IS POSSIBLE!

Introducing... Giovanni Livera

One afternoon after school, seven-year-old Giovanni said to his mother, "Mom, when I grow up, I want to be a magician." She advised, "You can't do both."

So he became a magician. Giovanni started his career with his first paid magic show at the age of 10. He convinced 26 of his friends and neighbors to each pay a dime to watch him perform. And that's when he learned *Anything Is Possible!* Ever since, Giovanni has been making his living entertaining, inspiring, and training audiences.

Whether it is a banquet show to astonish or his *Anything Is Possible* motivational program to educate, Giovanni's years of entertainment experi-

ence translate into a memorable event that is custom tailored for your audience.

His business acumen and ability to sell complex concepts means that his tradeshow sales programs and *Presenting U* presentation skills training seminar create instant business growth for clients. Giovanni teaches you how to communicate information in a way that is completely unforgettable.

The International Brotherhood of Magicians recognized Giovanni's tremendous talent by awarding the Gold Cups Award for excellence in the art of close-up magic. Only four other magicians have received this recognition.

Giovanni has worked with more than half of the Fortune 500 companies, entertaining, designing, and delivering custom presentations. He now serves on the board of advisors for two major companies, Campus Pipeline, an Internet company serving the college market (on the board with Michael Dell), and TissueNet, an Internet-based clearinghouse for human tissue and organ donors.

Giovanni is president of Magic Marking Concepts, Inc., a publishing, training, and entertainment organization that helps companies, associations, and people entertain, market, and motivate through wonder, laughter, and inspiration.



BREAKFAST (provided) 7:30 AM—8:30 AM Ballroom A**8:30 AM—11:00 AM****FUTURE DIRECTIONS FOR DATA PROGRAMS**

Chair: Ralph Gillmann

Harshad Desai—FDOT Summary

Barna Juhasz—FHWA Summary

Anita Vandervalk—Chair, Transportation Research Board Statewide Data Committee

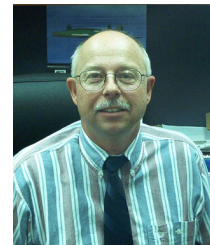
Mark Gardner—Chair, Transportation Research Board Traffic Monitoring Committee

MONDAY OPENING GENERAL SESSION FEATURED SPEAKERS

Ysela Llor
*State Transportation
 Planner,
 Florida Department
 of Transportation*



Bernard Jacob
*Department
 Head, LCPC*



Jim St. John
*Division
 Administrator,
 Federal Highway
 Administration*



Mike Snyder
*District 5 Secretary,
 Florida Department
 of Transportation*

CONFERENCE PROGRAM COMMITTEE*Host and Traffic Monitoring Community***Rick Reel, P.E.**Supervisor, Traffic Data Quality Control
Florida Department of Transportation*Host and Traffic Monitoring Community***Mulder Brown**Supervisor, Telemetry Construction Unit
Florida Department of Transportation*TRB Statewide Data Committee***Anita Vandervalk, P.E.**

Cambridge Systematics, Inc.

*Traffic Monitoring***Joe Avis**

Research Manager, Caltrans

*TRB Data Committee***Ed Christopher**Metropolitan Activities
Midwest Resource Center
Federal Highway Administration*TRB Traffic Monitoring Committee***Mark P. Gardner, P.E.**

Fugro-BRE, Inc.

*FHWA***Ralph Gillmann**

Federal Highway Administration

*Traffic Data Collection***Mark E. Hallenbeck**Research Engineer
University of Washington TRAC*Exhibitors***Perry M. Kent**President
Perry M. Kent & Associates*ICWIM***Bill McCall**Associate Director for Advanced
Transportation Technology
Center for Transportation Research and
Education (CTRE)
Iowa State University*Freight and Truck Transportation***Frank Southworth**Leader, Transportation Planning and
Systems Analysis Program
Oak Ridge National Laboratory*FHWA***Sabrina David**Florida Division Office
Federal Highway Administration*MPOs***James D. Thorne, P.E.**Metropolitan Transportation Specialist
Midwestern Resource Center
Federal Highway Administration*Remote Sensing Community***Joel L. Morrison, Ph. D.**Director, Center for Mapping
The Ohio State University*Sponsor and Transport Canada***Robert (Bob) Leore**Economist
Economic Analysis Directorate
Transport Canada

Notes:



CONFERENCE-AT-A-GLANCE



SUN			1:00 PM—5:30 PM Registration		5:30 PM—7:30 PM Welcome Reception Ballroom C/D	
MONDAY	7:30 AM—8:30 AM BREAKFAST Ballroom C/D		8:30 AM—8:55 AM OPENING GENERAL SESSION Ballroom B			
	9:05 AM—10:00 AM NATMEC OPENING Ballroom B		9:05 AM—10:00 AM ICWIM3 INTRO Salon 3/4		10:00 AM—10:30 AM BREAK Ballroom C/D	
		Salon 7/8	Salon 5	Salon 6	Salon 3/4	
	10:30 AM—12:00 PM	A2 Traditional Sensors	B2 Privatizing Traffic Monitoring Programs	C2 CMS: The Role of Travel and Traffic Data		WIM in Asia 1a WIM Testing (1)
	12:00 PM—1:30 PM LUNCH Keynote Speaker Ballroom A/B					
	1:30 PM—3:00 PM	A3 Non-Traditional Sensors	B3 Non-Traditional Data Sources	C3 Issues in Urban Traffic Data		1b WIM Testing (2) 2a WIM Standards (1)
	3:00 PM—3:30 PM BREAK Ballroom C/D					
	3:30 PM—5:00 PM	A4 Data Archiving	B4 State of the Art for Travel Time Data Collection & Analysis	C4 Estimation of Truck Traffic Volumes		2b WIM Standards (2) Panel Discussion 1: Harmonization of WIM Standards & Tests
TUESDAY	7:30 AM—8:30 AM BREAKFAST Ballroom C/D		8:30 AM—10:00 AM ITS / DATA GENERAL SESSION			8:50 AM 3 WIM Products
	10:00 AM—10:30 AM	BREAK Ballroom C/D				
	10:30 AM—12:00 PM	A6 Quality Control of Data	B6 Remote Sensing	C6 Making the Connection Between ITS & Traffic Monitoring		4a WIM Technologies (1)
	12:00 PM—1:00 PM LUNCH Ballroom A					
	1:00 PM—2:30 PM	A7 LTPP Specific Pavement Studies	B7 Integration of Data Sources	C7 ITS Archived Data-Now and the Future		4b WIM Technologies (2)
	2:30 PM—3:00 PM BREAK Ballroom C/D					
	3:00 PM—5:00 PM	A8 Automatic Traffic Recorder Fundamentals	B8 Integration of Data Sources (cont.)	C8 Monitoring for North American Cross Border Traffic		5 Enforcement Using WIM Panel Discussion 2: Enforcement, Technical & Legal Issues
	5:00 PM—7:00 PM Poolside Reception Live Music with Coco Loco (cash bar)					
WEDNESDAY	7:00 AM—8:00 AM BREAKFAST		8:00 AM—9:00 AM COMBINED NATMEC/ICWIM3 SESSION		9:30 AM—10:30 AM Poster Session/BREAK	
	10:30 AM—12:00 PM	VENDOR INFOMERCIALS Salon 5-8		FIELD DEMOS Rear Parking Lot		11:15 AM 6 Data Quality, Management & Use
	12:00 PM—1:30 PM LUNCH Ballroom A					
	1:00 PM—2:30 PM	A11 Weigh In Motion	B11 MPO Uses of Urban Traffic Monitoring	C11 Innovative Uses and Applications of ITS/Operations Data Archives		7 Application of WIM to Structures
	2:30 PM—3:00 PM BREAK Ballroom A					
	3:00 PM—4:30 PM	A12 Pavement Design Guide	B12 Future Data Programs & Performance Measures	C12 GIS and Web Tools to Organize Urban Traffic Data		8 Freight Mobility, Road Safety and Pricing
	7:00 PM—9:00 PM DINNER with the magic, laughter and inspiration of Giovanni Ballroom A					
THU	7:30 AM—8:30 AM BREAKFAST Ballroom A		8:30 AM—11:00 AM FUTURE DIRECTIONS FOR DATA PROGRAMS Ballroom A			